

REMARKS

Claims 1-20 are currently pending in the subject application and are presently under consideration. Claims 1, 5-7, 10, and 15, as shown on pp. 4-7 of the Reply, have been amended to correct minor informalities and to more clearly emphasize novel aspects of the claimed invention. Thus, it is respectfully requested that Examiner's objections to claims 1, 7, 10, and 15 be reversed. In addition, the specification has been amended as indicated on pp. 2-3.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objection to the Drawings

The drawings are objected to for various minor informalities. The attached sheet entitled "Replacement Sheet" includes changes to Figure 13. This sheet replaces the original sheet for Figure 13. In Figure 13 of the "Replacement Sheet," a bottom electrode is depicted at 1306 and positive charges have been depicted at 1310. Accordingly, applicants' representative requests withdrawal of this objection.

II. Rejection of Claims 1-20 Under 35 U.S.C. §102(e)

Claims 1-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by Subramanian, *et al.* (6,836,398 B1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Subramanian, *et al.* does not teach or suggest each and every limitation as recited in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The claimed invention relates to systems and methods for a post-chemical mechanical planarization (CMP) precursor treatment to create a polished surface with a smooth texture on a

substrate layer. Specifically, a wafer is subject to a CMP process. *After the CMP process*, the surface of the wafer is then exposed to an inorganic acid that can create a depression in the surface. In particular, independent claim 1, as amended, recites **...*exposing the surface that has undergone chemical mechanical planarization to an inorganic acid for shaping a surface depression thereupon...*** and **...*growing a passive layer within the surface depression.*** Independent claims 7, 9, and 15 recite a similar limitation(s). Subramanian, *et al.* does not disclose such novel aspects of applicants' claimed invention.

Instead, the cited reference utilizes dishing effects that occur *during a CMP process*. Subramanian, *et al.* employs a reducing CMP process that causes a dish region to occur on deposited conductive material during a CMP process. (*See* col. 12, lines 34-44). While applicants' representative concedes that Subramanian, *et al.* forms a dish region and a passive layer *during a reducing CMP process*, the cited document is silent specifically towards ***exposing a surface that has undergone a CMP process to an inorganic acid for shaping a surface depression.***

In view of at least the forgoing, it is respectfully submitted that Subramanian, *et al.* does not anticipate applicants' invention as recited in the subject claims, and withdrawal of this rejection is requested.

It is also noted that the subject matter of Subramanian, *et al.* and the claimed invention were, at the time the invention was made, subject to an obligation of assignment to Advanced Micro Devices, Inc. Accordingly, a rejection under 35 U.S.C. §103(a) would not be proper pursuant to the provisions of 35 U.S.C. §103(c).

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [AMDP938US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin

Reg. No. 40,894

AMIN & TUROCY, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731